

Memphis, Tenn. 38122 November 3,1978

Discussion of Test Results

The average Fibrograph 2.5% span length of short staple cotton tested from the Southwest through October 27 is considerably shorter from a year ago, according to the Cotton Division, Agricultural Marketing Service, USDA. Cottons are less uniform and finer. Samples tested are stronger at zero gage strength tests but weaker at 1/8" gage tests from a year ago. Both Shirley Analyzer nonlint content and picker and card waste are higher. Yarns spun from these samples show weaker yarn strength. Yarn appearance grades are higher. Imperfections are fewer. The average spinning potential is lower.

Medium staple samples tested from the Southeast are longer, and finer than a year ago. Both Shirley Analyzer nonlint content and picker and card waste are lower. Yarns spun from these samples are stronger, but have lower appearance grades. Yarn imperfections are lower. The spinning potential is higher.

South Central medium staple samples are shorter and stronger at zero gage fiber strength tests than a year ago. Shirley Analyzer nonlint content is lower. Picker and card waste is higher than a year ago. Yarns spun from these samples show weaker strength and lower appearance grades. Yarn imperfections are lower. The spinning potential is lower.

Medium staple samples from the Southwest are shorter, less uniform and stronger at both zero and 1/8" gage strength tests. Both Shirley Analyzer and picker and card waste are higher than a year ago. Yarns spun from these samples show weaker yarn strength and lower appearance grades. The spinning potential yarn number is lower.

Average test results for all medium staple samples show fibers to be shorter, less uniform and stronger at zero fiber strength than a year ago at this stage of the harvest. Both Shirley Analyzer nonlint content and picker and card waste are higher. Yarns spun from these samples are weaker and lower appearance grades. Yarn imperfections are lower. The average spinning potential yarn number is lower.

These reports are published bi-weekly during the harvesting season and will be summarized in a comprehensive report at the end of the crop year. A detailed description of the tests shown in this report may be found in the summary report for the previous season. 1/ These reports are available on request from the Standards Section, Cotton Division, Agricultural Marketing Service, U.S. Department of Agriculture, 4841 Summer Avenue, Memphis, TN. 38122.

^{1/} Summary of Cotton Fiber and Processing Test Results, Crop of 1977, USDA, AMS, Cotton Division, August 1978.

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1	1	18	8			- 3 -	- 0	51 5			
	1	Potent	Yarn	1 45	50	58	57	70	57	6	
ts	-	1 1 60		$\frac{-1}{(17)}$	(76)	(55)	(84)	(86)	(89)		
esul		Imperf- actions	No.	13	20	22 113	17	26	21 14	CU	
Processing test results	Yarn quality	ppear-	Index	106	96 86	94	93	88	96	4(22s) 5	
Processi	Ya	Skein str.	Lbs.	999	99	106	105	120	106	4(22)	
		P&C waste	Pet.	5.6	6.0	6.1	5.6	5.4	5.9	0.5	
		S A nonlint	Ret.	3.3	3.1	3.6	3.5	2.2	3.4	0.5	3.
	strength	1/8" gage	G/tex	22 21	23	23	22 23	26 25	23	7	71+1
results	Fiber	Zero	Mpsi	90	87	86	89 89	91	988	Q	פונה [פהר
Fiber test	Mike	ness	Rdg.	4.2	4.8	4.6	4.3	4.9	4.5	0.2	value of model distitu
Fib	raph	50/2.5 unif.	Pet.	46	94	45	46	94 42	46	Ø	
	Fibrograph	2.5% span	Inches	.98	1.07	1.11	1.09	1.13	1.10	0.02	a limited mimber of
	Lots	tested	No.	29	14	71 46	36	1.5	126		a limito
	Staple group	Crop year		Short Staple: Southwest 1977 1978	Medium Staple Southeast 1977 1978	South Central 1977 1978	Southwest 1977 1978	West 1977 1978	U.S. Average 1977 1978	Significant dif- ference 2/	1/ Based on

Minimum differences considered to be significant for comparisons in this table. Parentheses indicate the neps per 1000 yards of yarn as measured by the Uster instrument. Based on a limited number of samples of modal quality

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Table 2 -- Cotton, American upland short staple: Quality characteristics by production areas, crop of 1978.

í					65	80	27
	Imprfect'ns Spin. Neps/M Yards Poten	tial	No		120 110 26 (2) 8 (8) 39	110 19 (2) 5 (6) 38	33 (0) 7 (18) 37
	rns	Sor	No	,	17/8	. 5	- 6
03	prfect ps/M	or 22 tx 27			(2	(2	0
Yarn	Imi	r 88	잉		26	19	
arded	ance	2280) 27 ta	N		110	110	110
Lts - C	Appearance Index	8s or 74 tx	No		120	120	120
Processing Test Results - Carded Yarns	ion	2s or	Pct		6.3	6.2	5.5
g Tes	Elongation	or tx	Pet Pet				
essin	E	x 8s 74	ΔI		CENT 6.	CENT 6.	CENT 6.
Proc	gth	22so 27 t:	Lbs		100 PERCENT	99 PERCENT	99 PERCENT
	Strength	8s or 74 tx	Lbs		100 PERCENT 281 95 6.7	99 PERCENT 279 94 6.5	99 PERCENT 280 93 6.4
	Color Raw Stock P & C	Waste 8s or 22s or 8s or 22s or 8s or 22sor 8s or 22sor 74 tx 27 tx 74 tx 27 tx 74 tx 27 tx 74 tx 27 tx	Pet		7.1	5.0	8.
	lor Stock	Gra Yel	12		4	4	4
	Color Raw Sto		Pct No No		2	2	- m
	Elon- S.A.		Pet		3.7	2.3	4.1
ts	Elon-	1/8"	Pet		611	57	LX571 4.1 3
Fiber Test Results	Fiber Strength	Zero 1/8" Gage Gage	G/tex		LANKART 611 21 5.9	LANKART 57 20 5.	LANKART LX571 23 5.1
Fiber	Fi	Zero Gage	Mpsi		91	16	95
	Mike		Rdg		4.0	4.6	5.1
	ital graph	Unif	Pet		45	47	4.7
	Digital Fibrograph	Stple Span	되		41 30 0.90	31 30 0.93	96.0
		Stple	32s	AREA	30	30	30
Area,				AR		31	45
tion	& Numl	Grade Name & Code			EXAS	ш	S
Production Area,	& Sample Number	No Name		SOUTHWEST	CENTRAL TEXAS BRANDON 3 SLM	COMMERCE 2 MID	KAUFMAN 2 SLM LT SP 42 30 0.95

1/ Parentheses indicate the neps per 1000 yards of yarn as measured by the Uster instrument.

							01	m	-	5 -	.0	_				_	_
1		Spin.	Poten- tial	SI SI		1/ 8 (186) 63	(126) 52	(182) 58	9 (214) 60	(204) 57	9 (194) 28	E9 (98t		(274) 53	(176) 48	(154) 51	(158) 57
		- W				80	~	8	6	2	6	7) E1			6	9	
		act'n	50s d	윙		$\frac{1}{(54)}$	(44)	(99)	(64)	(44)	(72)	(102)13 (486)		6 (98)	(20)	(94)	(38) 5
	arns	Imprfect'ns Neps/M Yard	22s or 50s or 27 tx 12 tx	외		12	6	10	13	6	11	11		10	12	00	6
	Carded Yarns	ance	50s or	윉		80	06	06	80	80	70	9		10	80	06	06
	ts - Ca	Appearance Index	22s or 27 tx	1		110	100	110	100	110	06	06		06	100	110	100
	Test Results -	ion	50s or 12 tx			4.7	4.4	4.7	4.4	4.4	4.2	4.3			3.9	4.3	4. R.
	g Tes	Elongation	See			NT 6.2	NT 6.2	1 V V V V V V V V V V V V V V V V V V V	0.9	NT 6.4	NT 5.7	NT 6.3		NT 0.9	NT 5.9	NT 6.3	NT 6.5
	Processing	E		Pet		CE	PERCENT 29 6.2	SC E	S	CE	SCE.	SC.E		S m	CE	CE	SC.
	Proc	Strength	50s or	Lbs		90 PEF	29 29										
1	100	Stre	22s or 50s or 27 tx 12 tx	Tos		112	100	95	113	100	103	112		102	97	104	1100
		P & C	Waste	Pet		0.9	6.1	6.4	6.9	5.5	7.0	5.3	5.	5.5	1.9	5.9	5.7
T		or tock	Yel	읾		m	m	4	4	4	4	4		m	2	m	m
1		Color Raw Stock	Gra	읾		2	2	. "	2	2	2	~ ~		2	m	-	2
		S.A.	Non- Lint	Pet		3.3	2.7	2.7	2.0	5.9	3.7	2.2		2.9	2.9	2.5.	3.2
						ın	603	213			E			.0	10	213	
	Lts	Elon-	gat'n 1/8"	Pet	,	INE 5	ILLE 603	11LE 2	INE 61	INE 16	KING 5.3	304 5.4	100	INE 16	INE 5	11LE 3	INE 61 6.5
	Fiber Test Results	,h	1/8" Gage	G/tex		DELTAPINE 23 6.3	STONE V	STONE V	DELTAP 25	DEL TAP	DIXIE 22	COKER 22		DELTAP 24	DEL TAP	STONE V	DELTAPINE 24 6.
	Test	Fiber															
The state of	Fiber	St	2 0	Mpsi		86	86	84	92	83	0.6	88	*	84	92	83	98
			Mike	Rdg		4.5	4.5	5.2	4.7	4.5	4.5	4.4		4.5	5.0	4.6	5.1
		al	Unif.	Pet		46	46	94	45	47	46	757		45	46	77	48
		Digital Fibrograph	2.5% span	티		1.09	1.07	1.11	1.12	1.09	1.03	1.15		11.11	1.07	11.11	1.14
			Stple	32s	AREA	34	34	33	35	34	34	36	EA	35.	34	35	35
	rea,	er			AR	. 14	41	41	41	41	45	31	AR	41	14	41	14
I am A	ficat.	Numb	Code			TLLE	LE		LE	LLE	Sp.	LE	RAL	œ			
Acres 4	Classification	& Sample Number	Grade Name & Code	1-1	AST	ABAMA HARPERSVILLE SLM	HUNTSVILLE SLM	SON	MOUNDVILLE	WILSONVILL	ICK	CARO	CENT	KANSAS ALTHEI MER SLM	TTO	SI	BRA
De	E .	Sa		,	SOUTHEAST	ALABAMA HARPE 1 SLM	HUNTS 1 SLM	MADISON 1 SLM	MDUND 1 SLM	WILSO 1 SLM	GEDRGIA BOSTWICK 1 SLM LT	SOUTH CAROLINA MAYESVILLE 1 MID	SOUTH CENTRAL AREA	ARKANSAS ALTHEI	DERMOTT SLM	DUMAS 2 SLM	EUDORA 2 SLM
1		1	S.	-	S	AL	_			-	9	SC	S	A	*	~	17

 $\underline{1}/$ Parentheses indicate the neps per 1000 yards of yarn as measured by the Uster instrument.

Table 3.-Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1978.

							- 6	-								1
	Spin. Poten- tial	8	$\frac{1}{148}$ 57	(208) 50	(300) 53	65 (007)	(318) 48	(288) 50	(248)53	(108)21	(174)42	(162)47	(180)62	(174)46	(176)56	(156)52
	Ct'ns Yards 50s or	<u>8</u>	7(07)	(62) 9	41 (06)	(124)17	(74)14	(42)10	(20) 8	(20) \$	(68)12	(56)10	(24) 7	1 (79)	(50) 7	(32) 8
rns	Imprfe Neps/M 22s or 27 tx	SI SI	6	=======================================	20	23	18	14	7	2	12	13	4	12	11	10
Carded Yarns	x or	욌	80	10	70	70	02	80	06	80	10	80	70	06	70	80
1	Appead Inde	임	06	90	80	06	9.6	06	120	110	100	110	100	100	100	06
Test Results	ation 50s or	Pet	4.5	4.5	5.0	5.3	8.4	4.5	4.6	4.5	4.2	4.0	4.9	4.7	4.6	4.4
Processing Te	Elong 22s or 27 tx	Pet	PERCENT 31 6.5	PERCENT 32 6.3	PERCENT 36 7.0	PERCENT 35 6.0	PERCENT 32 5.4	PERCENT 34 6.5	PERCENT 33 5.5	PERCENT 33 6.5	PERCENT 28 5.2	PERCENT 29 5.7	PERCENT 38 6.9	PERCENT 35 6.5	PERCENT 34 6.5	PERCENT 35 5.6
Pro	Strength 22s or 50s or	TI sq	100 PE	100 P	100 1	100 P	100 P	100 P	100 P	100 P	. 80 PE	100 P	113 3	100 P	100 PE 106 34	100 PE 105 35
	P & C Waste	Pet	5.0	5.1	7.9	0.9	9.9	6.2	5.5	5.6	6.5	6.9	9.9	6.9	6.1	0.9
	Color Raw Stock Gra Yel	외	en	3	~	6	2	6	3	4	4	4	6	~	6	3
	Raw Gra	8	-	~		2	2	2	2	2	2	9	2	2	-	1
	S.A. Non- Lint	Pet	3.0	2.3	3.9	213	731N 5.5	2.5	2.6	2.9	2.6	. 4.7	8.4	213	2.8	4.2
lts	Elon- gat'n 1/8"	Pet	13 6.2	5.8	PINE 16	LLE	VILLE 731N	PINE 61	PINE 55	PINE 16	PINE 61	VILLE 213	PINE 16 6.3	LLE 5.9	PINE 61 6.3	VILLE 825 5.3
Fiber Test Result	Fiber rength o 1/8"	G/tex	REX 713 20	VAIL 22	DEL TAP I	STONE VI	STONE VI	DELTAPI 25	DEL TAPI 23	DELTAPI 24	DELTAP I 24	STONEVI 23	DELTAP I	STONEVI 23	DEL TAPI	STONE VI
iber T	Fiber Strength Zero 1/	Mpsi	19	86	81	87	98	84	92	. 89	. 68	85	85	84	88	91
E4 .	Mike	Rdg	3.9	4.5	4.5	6.4	4.7	5.0	6.4	4.6	5.3	5.5	4.2	T-4	8.	6.4
	raph Unif.	Pet	44	45	46	46	4 4	47	46	4.7	94	47	, 94	94	45	47
	Digital Fibrograph 2.5% Unif	티	1.12	1.12	1.14	1.10	1.09	1.12	1.08	1.06	1.05	1.10	1.11	11.11	1.10	1.10
1	Stple	328	35	35	35	35	35	35	35	34	34	35	35	35	35	35
Area,	-		41	31	45	41	DENCE 50	41	41	41	41	AND 42	51	51	17	20
Production Area,	Sample Number No Grade	and the second second	KEISER 41 35	LEACHVILLE 2 MID	MARION 1 SLM LT SP	TRUMANN 1 SLM	LOUISIANA LAKE PROVIDENCE 1 LM PLUS 50	MONROE 1 SLM	DAK RIDGE 1 SLM	PIONEER 1 SLM	SHREVEPORT 1 SLM	SICTLY ISLAND 2 SLM LT SP 4	MISSISSIPPI BELZONIA I LM	CLARKSDALE 1 LM	DUNCAN 2 SLM	GLENDORO 1 LM PLUS

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1	١.			4.7	19	94	59	51	59	84	51	57	40	64	4.7
	Spin.	Poten- tial	외	(16) 10 (172) 4	8 (152)	302)	358)	9 (200)	7 (150)	154)	5 (132) 7 (148)	288)	(208)	6 (186)	(30) 7 (150)
	'ns	s or	01	1/0 (8 ((50)11 (302)	(94) 12 (358)			(68)13 (154))16 (1 6		7 (
	Imprfect'ns Neps/M Yard	22s or 50s or 27 tx 12 tx	외					(42)	(36)		(26)	17 (104)16 (288)		(94)	
Yarns	Imp			13	7	12	13	11	10	19		17	15	13	6
- Carded Yarns	ance	50s or	욄	80	06	10	80	70	80	70	90	70	80	10	70
ults - Ca	Appearance Index	22s or 27 tx	1	110	120	100	06	06	100	110	100	80	100	06	100
Test Results	Elongation	r 50s or	ĭ	3.8	4.7	4.2	5.5	4.5	4.5	0.4	3.5	4.7	4.5	4.2	4.6
Processing 1		or 22s or x 27 tx	1	PERCENT 36 5.8	PERCENT 37 6.5	PERCENT 32 6.2	PERCENT 38 6.5	PERCENT 33 5.8	PERCENT 37 6.0	PERCENT 31 6.0	PERCENT 32 5.0 31 5.4	PERCENT 36 6.7	PERCENT 30 5.8 30 6.0	PERCENT 34 6.2	PERCENT 32 6.5
Proc	Strength	50s on	Lbs	PER 36	37	PER 32	9ER	PER 33		PER 31					32 32
	Stre	22s or 50s or 27 tx 12 tx	Ibs	100	110	101	111	102	111	001	100 98 100	108	98 97	106	66
	K P & C	Waste	Pet	7.5	5.3	9.3	7.0	7.7	6.2	7.8	6.0	5.4	6.0	6.3	5.3
	Color Raw Stock	Yel	읽	3	m	2	3	6	۳	e	m m	ю	44	4	4
1 - 3			ଥା	2	2	6	ю	-	-	3	- 4 m	-	22	2	2
		Non- Lint	Pet	3.9	2.6	5.2	5.2	3.4	3.5	31N 4.1	2.8 3.1	2.8	213	11 2.6	2.9
ults	Elon-	gat'n 1/8"	Pet	INE 26 5.4	INE 16 6.8	1LLE 213	6.5	INE 55 5.6	INE 55	STONEVILLE 731N 24 5.3 4.1	ILLE 256 4.4 4.3	STONEVILLE 213 23 6.4		KING 111 5.5	STONEVILLE 213 23 6.2
Fiber Test Results	Fiber	1/8" Gage	1,	DELTAPIN 24	DELTAPIN 24	STONEVILLE 23 5.7	DES 24	DELTAPIN 23	DEL TAP IN 24	STONE V 24	STONE VILLE 4.4	STONE V	STONE VILLE 22 5.0	DIXIE	STONEV 23
iber T	Fi	Zero	Mpsi	95	88	83	87	89	96	98	94	81	86	88	83
F		Mike	Rdg	4.5	4.7	4.2	4.7	4.1	4.3	6.4	4.5	4.5	5.0	4.7	4.6
	al	Unif.	Pet	45	94	44	94	44	44	46	44	45	94	94	45
	Digital Fibrograph		티	1.08	1.13	11.11	1.12	1-12	1.10	1.09	1.10	1.10	1.04	1.05	1.07
		Stple	32s	34	34	35	35	35	34	35	35	35	333	34	34
Area,	ber	le le	ontin	11	41	51	51	41	41	51	51	14	31	41	41
Production Area, Classification	Sample Number	No Grade Name & Code	SOUTH CENTRAL Continued	GREENVILLE 1 SLM	GREENVILLE 1 SLM	LULA	MORGAN CITY	SARDIS 1 SLM	SCOTT 2 SLM	SHAW 1 LM	TRIBBETT 1 LM 2 LM	MISSOURI HORNERSVILLE 2 SLM	TENNESSEE ALAMO 1 MID 2 MID	BROWNSVILLE 1 SLM	ELORA 1 SLM

Table 3 -- Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1978.

1			1		45	55
	Spin.	Poten- tial	SI		70 11 (18) 10 (192) 45	19 (56) 12 (198) 55
	'ns	s or	01		1/10	12
62	Imprfect'ns Neps/M Yards	or 50	Z		1 (18	6 (56
Yarn		or 22s	No		1	70 1
arded	rance	50s o	N		70	70
ts - (Appearance	2s or 7 tx	No		90	06
Processing Test Results - Carded Yarns		22s or 50s or 22s or 50s or 22s or 50s or 52s or 50s or 27 tx 12 tx 12 tx 12 tx 27 tx 12 tx 12 tx	اند		0.4	1.4
Test	Strength Elongation	or 50s	Pe			
ssing	Elo	22s 27	Pet		ENT 6.2	ENT 6.4
Proce	gth	50s or	Lbs		95 PERCENT 7 31 6.	95 PERCENT
	Stren	es or	Lbs		95 PERCENT 97 31 6.2	95 PERCENT 106 35 6.4
	Ď					
	F S	Waste	Pet		7.6	7.1
	Color Raw Stock P & C	Gra Yel	No		4	8
			No		n	2
		Non- Lint	Pet		3.0	6.1
	Elon-	gat'n 1/8"	Pet		5P37 6.0	6.2
Fiber Test Results			ex		22 6.0	
est Re	Fiber	1/8" Gage	Mpsi G/tex		TAMC 22	DPL 16 23
ber Te	Fiber	Gage Gage	Mpsi		83	68
Fi		Mike	Rdg		6	m
					3.9	4.3
	Digital Fibrograph	Unif.	Pet		43	94
	Digital	Stple 2.5% span	II		*0*	1.07
		tple	32s	AREA	CORPUS CHRISTI 3 SLM LT SP 42 33 1.04	GANADO 42 34 1.07
ion	er			AR	T.I.	45
tion A	& Numb	Grade Name & Code			CHRIS	SP
Production Area, Classification	& Sample Number	Gr		WEST	SOUTH TEXAS CORPUS CHI	GANADO SLM LT
1		No		SOUTHWEST	SOUTH COR	GAN 3 SL

1/ Parentheses indicate the neps per 1000 yards of yarn as measured by the Uster instrument,

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		Spin.	tial	N N		$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	(82)		
		rds	t di	No		0 6	5-		
		Imprfect'ns Neps/M Yards	12 508	2		(22)	8 (20) 5 2 (8) 1		
	arns	Imprfect'ns Neps/M Yard	22s c 27 tx	No		12	8 2		
	ded Y	ee	s or tx	No		090	090		
	- Car	Appearance Index	or 50 x 12	41					
	Processing Test Results - Carded Yarns	App	22s 27 t.	No		110	110		
-	t Resi	ion	S or	Pet		4.2	4.4		
	Test	Elongation	or 50						
	ssing	Elc	22s 27 t	Pet		5.7 6.2	ENT 6.3		
	Proce	th	00s or	Lbs		97 PERCENT 111 36 5.7 135 47 6.2	100 PERCENT 2 38 6.2 2 45 5.8		
		Strength	tx	Lbs		97	00		
		S.	r 22s	印		13	1 112 132		
		P & C and	Comber 22s or 50s or 22s or 50s or 22s or 50s or 22s or 50s or Waste 27 tx 12 tx 27 tx 12 tx 27 tx 12 tx 27 tx 12 tx	Pet			4 5.4		
-		rtock	Yel	No		4*	4 *		
		Color Raw Stock	Gra	8		2.9 3 4 7.9	COKER 310 24 5.2 2.3 2		
		A.		131		6	m		
		Elon- S.A.		Pet			7		
-	t s	Elon-	1/8"	Pet		5.3	5.2		
	lesul		= 8	G/tex		ec.	ER 3		
	est F	Fiber	1/8"	5		COKE 26	COK1		
	Fiber Test Results	Fi	Zero	Mpsi		18	18		
	F		Mike Zero			6	9		
				Rdg		4	4.6		
		al	Unif.	Pet		47	45		
		Digital	2.5% span	FI		13	11		
-		1.5	Stple 2.5%	1		÷			
	3,		Stp	32s	AREA	41 35 1-13 47 4-9	PIEDMONT 1 MID LT SP 32 34 1.11		
	Production Area,	mber	ode			41	32		
	ction	& le Nu	Grade Name & Code		-	ABAMA HOLTVILLE SLM	PIEDMONT MID LT SP		
1	PE 10	Sample	& Sample Number	Sample	l la		SOUTHEAST	4>	M L
	Produ	San	Z		H	ALABAMA HOLTVI 1 SLM	ED		

1/ Parentheses indicate the neps per 1000 yards of yarn as measured by the Uster instrument.
* Comber Waste and Combed Yarn Data

